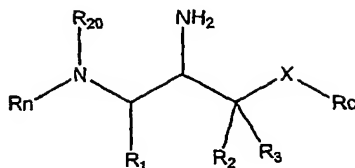


WHAT IS CLAIMED IS:

1. A compound of the formula:



5

or a pharmaceutically acceptable salt or ester thereof;

wherein X is O, S, NR₂₀, or NR₂₀NR₂₀;

wherein each R₂₀ is H, C₁₋₆ alkyl or alkenyl, C₁₋₆ haloalkyl or
 10 C₄₋₇ cycloalkyl;

wherein R₁ is -(CH₂)₁₋₂-S(O)₀₋₂-(C₁₋₆ alkyl), or

C₁₋₁₀ alkyl optionally substituted with 1, 2, or 3 groups
 independently selected from halogen, -OH, =O, -SH,
 -C≡N, -CF₃, -C₁₋₃ alkoxy, amino, mono- or
 15 dialkylamino, -N(R)C(O)R', -OC(=O)-amino and -
 OC(=O)-mono- or dialkylamino, or

C₂₋₆ alkenyl or C₂₋₆ alkynyl, each of which is optionally
 substituted with 1, 2, or 3 groups independently
 selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁₋₃
 20 alkoxy, amino, and mono- or dialkylamino, or

aryl, heteroaryl, heterocyclyl, -C₁₋₆ alkyl-aryl, -C₁₋₆
 alkyl-heteroaryl, or -C₁₋₆ alkyl-heterocyclyl, where
 the ring portions of each are optionally substituted
 with 1, 2, 3, or 4 groups independently selected
 25 from halogen, -OH, -SH, -C≡N, -NR₁₀₅R'₁₀₅, -CO₂R, -
 N(R)COR', or -N(R)SO₂R', -C(=O)-(C₁₋₄) alkyl, -SO₂-
 amino, -SO₂-mono or dialkylamino, -C(=O)-amino,
 -C(=O)-mono or dialkylamino, -SO₂-(C₁₋₄) alkyl, or
 C₁₋₆ alkoxy optionally substituted with 1, 2, or 3

30 groups which are independently selected from
 halogen, or

C₃-C₇ cycloalkyl optionally substituted with 1, 2, or
 3 groups independently selected from halogen,
 -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, -C₁-C₆
 alkyl and mono- or dialkylamino, or
 5 C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3
 groups independently selected from halogen, -
 OH, -SH, -C≡N, -CF₃, -C₁-C₃ alkoxy, amino,
 mono- or dialkylamino and -C₁-C₃ alkyl, or
 10 C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl each of which is
 optionally substituted with 1, 2, or 3 groups
 independently selected from halogen, -OH, -SH,
 -C≡N, -CF₃, C₁-C₃ alkoxy, amino, C₁-C₆ alkyl and
 mono- or dialkylamino; and the heterocyclyl
 group is optionally further substituted with
 15 oxo;
 R and R' independently are hydrogen, C₁-C₁₀ alkyl, C₁-C₁₀
 alkylaryl or C₁-C₁₀ alkylheteroaryl;
 wherein R_c is hydrogen, -(CR₂₄₅R₂₅₀)₀₋₄-aryl, -(CR₂₄₅R₂₅₀)₀₋₄-
 heteroaryl, -(CR₂₄₅R₂₅₀)₀₋₄-heterocyclyl, -(CR₂₄₅R₂₅₀)₀₋₄-aryl-
 20 heteroaryl, -(CR₂₄₅R₂₅₀)₀₋₄-aryl-heterocyclyl, -(CR₂₄₅R₂₅₀)₀₋₄-
 aryl-aryl, -(CR₂₄₅R₂₅₀)₀₋₄-heteroaryl-aryl, -(CR₂₄₅R₂₅₀)₀₋₄-
 heteroaryl-heterocyclyl, -(CR₂₄₅R₂₅₀)₀₋₄-heteroaryl-
 heteroaryl, -(CR₂₄₅R₂₅₀)₀₋₄-heterocyclyl-heteroaryl,
 -(CR₂₄₅R₂₅₀)₀₋₄-heterocyclyl-heterocyclyl, -(CR₂₄₅R₂₅₀)₀₋₄-
 25 heterocyclyl-aryl, -[C(R₂₅₅)(R₂₆₀)]₁₋₃-CO-N-(R₂₅₅)₂, -
 CH(aryl)₂, -CH(heteroaryl)₂, -CH(heterocyclyl)₂,
 -CH(aryl)(heteroaryl), -(CH₂)₀₋₁-CH((CH₂)₀₋₆-OH)-(CH₂)₀₋₁-
 aryl, -(CH₂)₀₋₁-CH((CH₂)₀₋₆-OH)-(CH₂)₀₋₁-heteroaryl, -CH(-aryl
 or -heteroaryl)-CO-O(C₁-C₄ alkyl), -CH(-CH₂-OH)-CH(OH)-
 30 phenyl-NO₂, (C₁-C₆ alkyl)-O-(C₁-C₆ alkyl)-OH; -CH₂-NH-CH₂-
 CH(-O-CH₂-CH₃)₂, -(CH₂)₀₋₆-C(=NR₂₃₅)(NR₂₃₅R₂₄₀), or
 C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 groups
 independently selected from the group consisting of

R_{205} , $-OC=ONR_{235}R_{240}$, $-S(=O)_{0-2}(C_1-C_6 \text{ alkyl})$, $-SH$,
 $-NR_{235}C=ONR_{235}R_{240}$, $-C=ONR_{235}R_{240}$, and $-S(=O)_2NR_{235}R_{240}$, or
 $-(CH_2)_{0-3}-(C_3-C_8) \text{ cycloalkyl}$ wherein the cycloalkyl is
optionally substituted with 1, 2, or 3 groups
independently selected from the group consisting of
 R_{205} , $-CO_2H$, and $-CO_2-(C_1-C_4 \text{ alkyl})$, or
cyclopentyl, cyclohexyl, or cycloheptyl ring fused to
aryl, heteroaryl, or heterocyclyl wherein one, two
or three carbons of the cyclopentyl, cyclohexyl, or
cycloheptyl is optionally replaced with a heteroatom
independently selected from NH, NR_{215} , O, or $S(=O)_{0-2}$,
and wherein the cyclopentyl, cyclohexyl, or
cycloheptyl group can be optionally substituted with
one or two groups that are independently R_{205} , $=O$,
 $-CO-NR_{235}R_{240}$, or $-SO_2-(C_1-C_4 \text{ alkyl})$, or
 $C_2-C_{10} \text{ alkenyl}$ or $C_2-C_{10} \text{ alkynyl}$, each of which is
optionally substituted with 1, 2, or 3 R_{205} groups,
wherein
each aryl and heteroaryl is optionally substituted with
1, 2, or 3 R_{200} , and wherein each heterocyclyl is
optionally substituted with 1, 2, 3, or 4 R_{210} ;
 R_{200} at each occurrence is independently selected from $-OH$,
 $-NO_2$, halogen, $-CO_2H$, $C\equiv N$, $-(CH_2)_{0-4}-CO-NR_{220}R_{225}$, $-(CH_2)_{0-4}-$
 $CO-(C_1-C_{12} \text{ alkyl})$, $-(CH_2)_{0-4}-CO-(C_2-C_{12} \text{ alkenyl})$, $-(CH_2)_{0-4}-$
 $CO-(C_2-C_{12} \text{ alkynyl})$, $-(CH_2)_{0-4}-CO-(C_3-C_7 \text{ cycloalkyl})$, $-$
 $(CH_2)_{0-4}-CO-aryl$, $-(CH_2)_{0-4}-CO-heteroaryl$, $-(CH_2)_{0-4}-CO-$
 $heterocyclyl$, $-(CH_2)_{0-4}-CO-O-R_{215}$, $-(CH_2)_{0-4}-SO_2-NR_{220}R_{225}$, $-$
 $(CH_2)_{0-4}-SO-(C_1-C_8 \text{ alkyl})$, $-(CH_2)_{0-4}-SO_2-(C_1-C_{12} \text{ alkyl})$, $-$
 $(CH_2)_{0-4}-SO_2-(C_3-C_7 \text{ cycloalkyl})$, $-(CH_2)_{0-4}-N(H \text{ or } R_{215})-CO-O-$
 R_{215} , $-(CH_2)_{0-4}-N(H \text{ or } R_{215})-CO-N(R_{215})_2$, $-(CH_2)_{0-4}-N-CS-$
 $N(R_{215})_2$, $-(CH_2)_{0-4}-N(-H \text{ or } R_{215})-CO-R_{220}$, $-(CH_2)_{0-4}-NR_{220}R_{225}$,
 $-(CH_2)_{0-4}-O-CO-(C_1-C_6 \text{ alkyl})$, $-(CH_2)_{0-4}-O-P(O)-(OR_{240})_2$,
 $-(CH_2)_{0-4}-O-CO-N(R_{215})_2$, $-(CH_2)_{0-4}-O-CS-N(R_{215})_2$, $-(CH_2)_{0-4}-O-$
 (R_{215}) , $-(CH_2)_{0-4}-O-(R_{215})-COOH$, $-(CH_2)_{0-4}-S-(R_{215})$, $-(CH_2)_{0-4}-$

O-(C₁-C₆ alkyl optionally substituted with 1, 2, 3, or 5 - F), C₃-C₇ cycloalkyl, -(CH₂)₀₋₄-N(H or R₂₁₅)-SO₂-R₂₂₀, -(CH₂)₀₋₄-C₃-C₇ cycloalkyl, or

C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 R₂₀₅ groups, or

C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl, each of which is optionally substituted with 1 or 2 R₂₀₅ groups, wherein

the aryl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 groups that are independently R₂₀₅, R₂₁₀, or

C₁-C₆ alkyl substituted with 1, 2, or 3 groups that are independently R₂₀₅ or R₂₁₀, and wherein

the heterocyclyl group at each occurrence is optionally substituted with 1, 2, or 3 groups that are independently R₂₁₀;

R₂₀₅ at each occurrence is independently selected from C₁-C₆ alkyl, halogen, -OH, -O-phenyl, -SH, -C≡N, -CF₃, C₁-C₆ alkoxy, NH₂, NH(C₁-C₆ alkyl) or N-(C₁-C₆ alkyl)(C₁-C₆ alkyl);

R₂₁₀ at each occurrence is independently selected from halogen, C₁-C₆ alkoxy, C₁-C₆ haloalkoxy, -NR₂₂₀R₂₂₅, OH, C≡N, -CO-(C₁-C₄ alkyl), -SO₂-NR₂₃₅R₂₄₀, -CO-NR₂₃₅R₂₄₀, -SO₂-(C₁-C₄ alkyl), =O, or

C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or C₃-C₇ cycloalkyl, each of which is optionally substituted with 1, 2, or 3 R₂₀₅ groups;

R₂₁₅ at each occurrence is independently selected from C₁-C₆ alkyl, -(CH₂)₀₋₂-(aryl), C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₇ cycloalkyl, and -(CH₂)₀₋₂-(heteroaryl), -(CH₂)₀₋₂-(heterocyclyl), wherein

the aryl group at each occurrence is optionally substituted with 1, 2, or 3 groups that are independently R₂₀₅ or R₂₁₀, and wherein

- the heterocyclyl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 R_{210} ;
- R_{220} and R_{225} at each occurrence are independently selected from -H, - C_3 - C_7 cycloalkyl, -(C_1 - C_2 alkyl)-(C_3 - C_7 cycloalkyl), -
- 5 (C₁-C₆ alkyl)-O-(C₁-C₃ alkyl), -C₂-C₆ alkenyl, -C₂-C₆ alkynyl, -C₁-C₆ alkyl chain with one double bond and one triple bond, -aryl, -heteroaryl, and -heterocyclyl, or -C₁-C₁₀ alkyl optionally substituted with -OH, -NH₂ or halogen, wherein
- 10 the aryl, heterocyclyl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 R_{270} groups
- R_{235} and R_{240} at each occurrence are independently H, or C₁-C₆ alkyl;
- 15 R_{245} and R_{250} at each occurrence are independently selected from -H, C₁-C₄ alkyl, C₁-C₄ alkylaryl, C₁-C₄ alkylheteroaryl, C₁-C₄ hydroxyalkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, -(CH₂)₀₋₄-C₃-C₇ cycloalkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, and phenyl; or
- 20 R_{245} and R_{250} are taken together with the carbon to which they are attached to form a carbocycle of 3, 4, 5, 6, or 7 carbon atoms, where one carbon atom is optionally replaced by a heteroatom selected from -O-, -S-, -SO₂-, and -NR₂₂₀-;
- 25 R_{255} and R_{260} at each occurrence are independently selected from -H, -(CH₂)₁₋₂-S(O)₀₋₂-(C₁-C₆ alkyl), -(C₁-C₄ alkyl)-aryl, -(C₁-C₄ alkyl)-heteroaryl, -(C₁-C₄ alkyl)-heterocyclyl, -aryl, -heteroaryl, -heterocyclyl, -(CH₂)₁₋₄-R₂₆₅-(CH₂)₀₋₄-aryl, -(CH₂)₁₋₄-R₂₆₅-(CH₂)₀₋₄-heteroaryl, -(CH₂)₁₋₄-R₂₆₅-(CH₂)₀₋₄-heterocyclyl, or
- 30 C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or -(CH₂)₀₋₄-C₃-C₇ cycloalkyl, each of which is optionally substituted with 1, 2, or 3 R_{205} groups, wherein

each aryl or phenyl is optionally substituted with 1, 2, or 3 groups that are independently R_{205} , R_{210} , or C_1 - C_6 alkyl substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210} , and wherein
 5 each heterocyclyl is optionally substituted with 1, 2, 3, or 4 R_{210} ;

R_{265} at each occurrence is independently -O-, -S- or -N(C_1 - C_6 alkyl)-;

R_{270} at each occurrence is independently R_{205} , halogen C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, $NR_{235}R_{240}$, -OH, -C≡N, -CO-(C_1 - C_4 alkyl), -SO₂- $NR_{235}R_{240}$, -CO- $NR_{235}R_{240}$, -SO₂-(C_1 - C_4 alkyl), =O,
 10 or

C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl or -(CH₂)₀₋₄- C_3 - C_7 cycloalkyl, each of which is optionally substituted
 15 with 1, 2, or 3 R_{205} groups;

wherein R_n is R'_{100} , -SO₂ R'_{100} , -(CRR')₁₋₆ R'_{100} , -C(=O)-(CRR')₀₋₆ R_{100} , -C(=O)-(CRR')₁₋₆-O- R'_{100} , -C(=O)-(CRR')₁₋₆-S- R'_{100} , -C(=O)-(CRR')₁₋₆-C(=O)- R_{100} , -C(=O)-(CRR')₁₋₆-SO₂- R_{100} ;
 -C(=O)-(CRR')₁₋₆-NR₁₀₀- R'_{100} ; or $\begin{matrix} Y-Z-X'-(CH_2)_{n7}-CHC(O)- \\ R_4 \end{matrix}$;

R_4 is selected from the group consisting of H; NH₂; -NH-(CH₂)_{n6}-
 20 R_{4-1} ; -NHR₈; -NR₅₀C(O) R_5 ; C_1 - C_4 alkyl-NHC(O) R_5 ; -(CH₂)₀₋₄ R_8 ; -O- C_1 - C_4 alkanoyl; OH; C_6 - C_{10} aryloxy optionally substituted with 1, 2, or 3 groups that are independently halogen, C_1 - C_4 alkyl, -CO₂H, -C(O)- C_1 - C_4 alkoxy, or C_1 - C_4 alkoxy; C_1 - C_6 alkoxy; aryl C_1 - C_4 alkoxy; -NR₅₀CO₂ R_{51} ; - C_1 - C_4 alkyl-
 25 NR₅₀CO₂ R_{51} ; -C≡N; -CF₃; -CF₂-CF₃; -C≡CH; -CH₂-CH=CH₂; -(CH₂)₁₋₄- R_{4-1} ; -(CH₂)₁₋₄-NH- R_{4-1} ; -O-(CH₂)_{n6}- R_{4-1} ; -S-(CH₂)_{n6}- R_{4-1} ; -(CH₂)₀₋₄-NHC(O)-(CH₂)₀₋₆- R_{52} ; -(CH₂)₀₋₄- R_{53} -(CH₂)₀₋₄- R_{54} ;

wherein

n_6 is 0, 1, 2, or 3;

30 n_7 is 0, 1, 2, or 3;

R_{4-1} is selected from the group consisting of -SO₂-(C_1 - C_8 alkyl), -SO-(C_1 - C_8 alkyl), -S-(C_1 - C_8 alkyl), -S-CO-

(C₁-C₆ alkyl), -SO₂-NR₄₋₂R₄₋₃; -CO-C₁-C₂ alkyl; -CO-NR₄₋₃R₄₋₄;

R₄₋₂ and R₄₋₃ are independently H, C₁-C₃ alkyl, or C₃-C₆ cycloalkyl;

5 R₄₋₄ is alkyl, arylalkyl, alkanoyl, or arylalkanoyl;

R₄₋₆ is-H or C₁-C₆ alkyl;

R₅ is selected from the group consisting of C₃-C₇ cycloalkyl; C₁-C₆ alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, 10 -NR₆R₇, C₁-C₄ alkoxy, C₅-C₆ heterocycloalkyl, C₅-C₆ heteroaryl, C₆-C₁₀ aryl, C₃-C₇ cycloalkyl C₁-C₄ alkyl, -S-C₁-C₄ alkyl, -SO₂-C₁-C₄ alkyl, -CO₂H, -CONR₆R₇, -CO₂-C₁-C₄ alkyl, C₆-C₁₀ aryloxy; heteroaryl optionally substituted with 1, 2, or 3 groups that are 15 independently C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, C₁-C₄ haloalkyl, or OH; heterocycloalkyl optionally substituted with 1, 2, or 3 groups that are independently C₁-C₄ alkyl, C₁-C₄ alkoxy, halogen, or C₂-C₄ alkanoyl; aryl optionally substituted with 1, 20 2, 3, or 4 groups that are independently halogen, OH, C₁-C₄ alkyl, C₁-C₄ alkoxy, or C₁-C₄ haloalkyl; and -NR₆R₇; wherein

R₆ and R₇ are independently selected from the group consisting of H, C₁-C₆ alkyl, C₂-C₆ alkanoyl, 25 phenyl, -SO₂-C₁-C₄ alkyl, phenyl C₁-C₄ alkyl;

R₈ is selected from the group consisting of -SO₂-heteroaryl, -SO₂-aryl, -SO₂-heterocycloalkyl, -SO₂-C₁-C₁₀ alkyl, -C(O)NHR₉, heterocycloalkyl, -S-C₁-C₆ alkyl, -S-C₂-C₄ alkanoyl, wherein

30 R₉ is aryl C₁-C₄ alkyl, C₁-C₆ alkyl, or H;

R₅₀ is H or C₁-C₆ alkyl;

R₅₁ is selected from the group consisting of aryl C₁-C₄ alkyl; C₁-C₆ alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, cyano,

heteroaryl, $-NR_6R_7$, $-C(O)NR_6R_7$, C_3-C_7 cycloalkyl, or $-C_1-C_4$ alkoxy; heterocycloalkyl optionally substituted with 1 or 2 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, C_2-C_4 alkanoyl, aryl C_1-C_4 alkyl, and $-SO_2$ C_1-C_4 alkyl; alkenyl; alkynyl; heteroaryl optionally substituted with 1, 2, or 3 groups that are independently OH, C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2 , $NH(C_1-C_6$ alkyl) or $N(C_1-C_6$ alkyl)(C_1-C_6 alkyl); heteroarylalkyl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2 , $NH(C_1-C_6$ alkyl) or $N(C_1-C_6$ alkyl)(C_1-C_6 alkyl); aryl; heterocycloalkyl; C_3-C_8 cycloalkyl; and cycloalkylalkyl; wherein the aryl; heterocycloalkyl, C_3-C_8 cycloalkyl, and cycloalkylalkyl groups are optionally substituted with 1, 2, 3, 4 or 5 groups that are independently halogen, CN, NO_2 , C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_6 alkanoyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, hydroxy, C_1-C_6 hydroxyalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, C_1-C_6 thioalkoxy C_1-C_6 alkyl, or C_1-C_6 alkoxy C_1-C_6 alkoxy;

R_{52} is heterocycloalkyl, heteroaryl, aryl, cycloalkyl, $-S(O)_{0-2}-C_1-C_6$ alkyl, CO_2H , $-C(O)NH_2$, $-C(O)NH(alkyl)$, $-C(O)N(alkyl)(alkyl)$, $-CO_2-alkyl$, $-NHS(O)_{0-2}-C_1-C_6$ alkyl, $-N(alkyl)S(O)_{0-2}-C_1-C_6$ alkyl, $-S(O)_{0-2}$ heteroaryl, $-S(O)_{0-2}$ aryl, $-NH(arylalkyl)$, $-N(alkyl)(arylalkyl)$, thioalkoxy, or alkoxy, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, thioalkoxy, halogen, haloalkyl, haloalkoxy, alkanoyl, NO_2 , CN, alkoxycarbonyl, or aminocarbonyl;

R_{53} is absent, $-O-$, $-C(O)-$, $-NH-$, $-N(alkyl)-$, $-NH-S(O)_{0-2}-$, $-N(alkyl)-S(O)_{0-2}-$, $-S(O)_{0-2}-NH-$, $-S(O)_{0-2}-N(alkyl)-$, $-NH-C(S)-$, or $-N(alkyl)-C(S)-$;

- R_{54} is heteroaryl, aryl, arylalkyl, heterocycloalkyl, CO_2H , $-CO_2$ -alkyl, $-C(O)NH(alkyl)$, $-C(O)N(alkyl)(alkyl)$, $-C(O)NH_2$, C_1-C_8 alkyl, OH, aryloxy, alkoxy, arylalkoxy, NH_2 , $NH(alkyl)$, $N(alkyl)(alkyl)$, or $-C_1-C_6$ alkyl- $CO_2-C_1-C_6$ alkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, CO_2H , $-CO_2$ -alkyl, thioalkoxy, halogen, haloalkyl, haloalkoxy, hydroxyalkyl, alkanoyl, NO_2 , CN, alkoxycarbonyl, or aminocarbonyl;
- X' is selected from the group consisting of $-C_1-C_6$ alkylidenyl optionally optionally substituted with 1, 2, or 3 methyl groups; and $-NR_{4-6}-$; or
- R_4 and R_{4-6} combine to form $-(CH_2)_{n_{10}}-$, wherein
- n_{10} is 1, 2, 3, or 4;
- Z is selected from the group consisting of a bond; SO_2 ; SO ; S ; and $C(O)$;
- Y is selected from the group consisting of H ; C_1-C_4 haloalkyl; C_5-C_6 heterocycloalkyl; C_6-C_{10} aryl; OH ; $-N(Y_1)(Y_2)$; C_1-C_{10} alkyl optionally substituted with 1 thru 3 substituents which can be the same or different and are selected from the group consisting of halogen, hydroxy, alkoxy, thioalkoxy, and haloalkoxy; C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from C_1-C_3 alkyl, and halogen; alkoxy; aryl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2 ; arylalkyl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2 ; wherein
- Y_1 and Y_2 are the same or different and are H ; C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 substituents selected from the group consisting of halogen, C_1-C_4 alkoxy, C_3-C_8 cycloalkyl, and OH ; C_2-C_6 alkenyl; C_2-C_6 alkanoyl; phenyl; $-SO_2-C_1-C_4$ alkyl; phenyl C_1-C_4 alkyl; or C_3-C_8 cycloalkyl C_1-C_4 alkyl; or

Y₁, Y₂ and the nitrogen to which they are attached form a ring selected from the group consisting of piperazinyl, piperidinyl, morpholinyl, and pyrrolidinyl, wherein each ring is optionally substituted with 1, 2, 3, or 4 groups that are independently C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkyl, or halogen;

R₁₀₀ and R'₁₀₀ independently represent aryl, heteroaryl, -aryl-W-aryl, -aryl-W-heteroaryl, -aryl-W-heterocyclyl, -heteroaryl-W-aryl, -heteroaryl-W-heteroaryl, -heteroaryl-W-heterocyclyl, -heterocyclyl-W-aryl, -heterocyclyl-W-heteroaryl, -heterocyclyl-W-heterocyclyl, -CH[(CH₂)₀₋₂-O-R₁₅₀]- (CH₂)₀₋₂-aryl, -CH[(CH₂)₀₋₂-O-R₁₅₀]- (CH₂)₀₋₂-heterocyclyl or -CH[(CH₂)₀₋₂-O-R₁₅₀]- (CH₂)₀₋₂-heteroaryl, where the ring portions of each are optionally substituted with 1, 2, or 3 groups independently selected from

-OR, -NO₂, halogen, -C≡N, -OCF₃, -CF₃, -(CH₂)₀₋₄-O-P(=O)(OR)(OR'), -(CH₂)₀₋₄-CO-NR₁₀₅R'₁₀₅, -(CH₂)₀₋₄-O-(CH₂)₀₋₄-CONR₁₀₂R₁₀₂', -(CH₂)₀₋₄-CO-(C₁-C₁₂ alkyl), -(CH₂)₀₋₄-CO-(C₂-C₁₂ alkenyl), -(CH₂)₀₋₄-CO-(C₂-C₁₂ alkynyl), -(CH₂)₀₋₄-CO-(CH₂)₀₋₄-(C₃-C₇ cycloalkyl), -(CH₂)₀₋₄-R₁₁₀, -(CH₂)₀₋₄-R₁₂₀, -(CH₂)₀₋₄-R₁₃₀, -(CH₂)₀₋₄-CO-R₁₁₀, -(CH₂)₀₋₄-CO-R₁₂₀, -(CH₂)₀₋₄-CO-R₁₃₀, -(CH₂)₀₋₄-CO-R₁₄₀, -(CH₂)₀₋₄-CO-O-R₁₅₀, -(CH₂)₀₋₄-SO₂-NR₁₀₅R'₁₀₅, -(CH₂)₀₋₄-SO₂-(C₁-C₈ alkyl), -(CH₂)₀₋₄-SO₂-(C₁-C₁₂ alkyl), -(CH₂)₀₋₄-SO₂-(CH₂)₀₋₄-(C₃-C₇ cycloalkyl), -(CH₂)₀₋₄-N(R₁₅₀)-CO-O-R₁₅₀, -(CH₂)₀₋₄-N(R₁₅₀)-CO-N(R₁₅₀)₂, -(CH₂)₀₋₄-N(R₁₅₀)-CS-N(R₁₅₀)₂, -(CH₂)₀₋₄-N(R₁₅₀)-CO-R₁₀₅, -(CH₂)₀₋₄-NR₁₀₅R'₁₀₅, -(CH₂)₀₋₄-R₁₄₀, -(CH₂)₀₋₄-O-CO-(C₁-C₆ alkyl), -(CH₂)₀₋₄-O-P(O)-(O-R₁₁₀)₂, -(CH₂)₀₋₄-O-CO-N(R₁₅₀)₂, -(CH₂)₀₋₄-O-CS-N(R₁₅₀)₂, -(CH₂)₀₋₄-O-(R₁₅₀), -(CH₂)₀₋₄-O-R₁₅₀'-COOH, -(CH₂)₀₋₄-S-(R₁₅₀), -(CH₂)₀₋₄-N(R₁₅₀)-SO₂-R₁₀₅, -(CH₂)₀₋₄-C₃-C₇ cycloalkyl, (C₂-C₁₀) alkenyl, or (C₂-C₁₀) alkynyl, or

- R₁₀₀ is C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 R₁₁₅ groups, or
- R₁₀₀ is -(C₁-C₆ alkyl)-O-C₁-C₆ alkyl) or -(C₁-C₆ alkyl)-S-(C₁-C₆ alkyl), each of which is optionally substituted with 1, 2, or 3 R₁₁₅ groups, or
- R₁₀₀ is C₃-C₈ cycloalkyl optionally substituted with 1, 2, or 3 R₁₁₅ groups;
- W is -(CH₂)₀₋₄-, -O-, -S(O)₀₋₂-, -N(R₁₃₅)-, -CR(OH)- or -C(O)-;
- R₁₀₂ and R_{102'} independently are hydrogen, or
- C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, aryl or -R₁₁₀;
- R₁₀₅ and R'₁₀₅ independently represent -H, -R₁₁₀, -R₁₂₀, C₃-C₇ cycloalkyl, -(C₁-C₂ alkyl)-(C₃-C₇ cycloalkyl), -(C₁-C₆ alkyl)-O-(C₁-C₃ alkyl), C₂-C₆ alkenyl, C₂-C₆ alkynyl, or C₁-C₆ alkyl chain with one double bond and one triple bond, or
- C₁-C₆ alkyl optionally substituted with -OH or -NH₂; or,
- C₁-C₆ alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, or
- R₁₀₅ and R'₁₀₅ together with the atom to which they are attached form a 3 to 7 membered carbocyclic ring, where one member is optionally a heteroatom selected from -O-, -S(O)₀₋₂-, -N(R₁₃₅)-, the ring being optionally substituted with 1, 2 or three R₁₄₀ groups;
- R₁₁₅ at each occurrence is independently halogen, -OH, -CO₂R₁₀₂, -C₁-C₆ thioalkoxy, -CO₂-phenyl, -NR₁₀₅R'₁₃₅, -SO₂-(C₁-C₈ alkyl), -C(=O)R₁₈₀, R₁₈₀, -CONR₁₀₅R'₁₀₅, -SO₂NR₁₀₅R'₁₀₅, -NH-CO-(C₁-C₆ alkyl), -NH-C(=O)-OH, -NH-C(=O)-OR, -NH-C(=O)-O-phenyl, -O-C(=O)-(C₁-C₆ alkyl), -O-C(=O)-amino, -O-C(=O)-mono- or dialkylamino, -O-C(=O)-phenyl, -O-(C₁-C₆ alkyl)-CO₂H, -NH-SO₂-(C₁-C₆ alkyl), C₁-C₆ alkoxy or C₁-C₆ haloalkoxy;

R₁₃₅ is C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₇ cycloalkyl, -(CH₂)₀₋₂-(aryl), -(CH₂)₀₋₂-(heteroaryl), or -(CH₂)₀₋₂-(heterocyclyl);

5 R₁₄₀ is heterocyclyl optionally substituted with 1, 2, 3, or 4 groups independently selected from C₁-C₆ alkyl, C₁-C₆ alkoxy, halogen, hydroxy, cyano, nitro, amino, mono(C₁-C₆)alkylamino, di(C₁-C₆)alkylamino, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, amino(C₁-C₆)alkyl, mono(C₁-C₆)alkylamino(C₁-C₆)alkyl, di(C₁-C₆)alkylamino(C₁-C₆)alkyl, and =O;

10 R₁₅₀ is hydrogen, C₃-C₇ cycloalkyl, -(C₁-C₂ alkyl)-(C₃-C₇ cycloalkyl), C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkyl with one double bond and one triple bond, -R₁₁₀, -R₁₂₀, or C₁-C₆ alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, -NH₂, C₁-C₃ alkoxy, R₁₁₀, and halogen;

15 R_{150'} is C₃-C₇ cycloalkyl, -(C₁-C₃ alkyl)-(C₃-C₇ cycloalkyl), C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ alkyl with one double bond and one triple bond, -R₁₁₀, -R₁₂₀, or C₁-C₆ alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, -NH₂, C₁-C₃ alkoxy, R₁₁₀, and halogen;

20 R₁₈₀ is selected from morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl, homomorpholinyl, homothiomorpholinyl, homothiomorpholinyl S-oxide, homothiomorpholinyl S,S-dioxide, pyrrolinyl and pyrrolidinyl, each of which is optionally substituted with 1, 2, 3, or 4 groups independently selected from C₁-C₆ alkyl, C₁-C₆ alkoxy, halogen, hydroxy, cyano, nitro, amino, mono(C₁-C₆)alkylamino, di(C₁-C₆)alkylamino, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, amino(C₁-C₆)alkyl, mono(C₁-C₆)alkylamino(C₁-C₆)alkyl, di(C₁-C₆)alkylamino(C₁-C₆)alkyl, and =O;

30 R₁₁₀ is aryl optionally substituted with 1 or 2 R₁₂₅ groups;

- R_{125} at each occurrence is independently halogen, amino, mono- or dialkylamino, -OH, -C≡N, -SO₂-NH₂, -SO₂-NH-C₁-C₆ alkyl, -SO₂-N(C₁-C₆ alkyl)₂, -SO₂-(C₁-C₄ alkyl), -CO-NH₂, -CO-NH-C₁-C₆ alkyl, or -CO-N(C₁-C₆ alkyl)₂, or
- 5 C₁-C₆ alkyl, C₂-C₆ alkenyl or C₂-C₆ alkynyl, each of which is optionally substituted with 1, 2, or 3 groups that are independently selected from C₁-C₃ alkyl, halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, and mono- and dialkylamino, or
- 10 C₁-C₆ alkoxy optionally substituted with one, two or three of halogen;
- R_{120} is heteroaryl, which is optionally substituted with 1 or 2 R_{125} groups; and
- R_{130} is heterocyclyl optionally substituted with 1 or 2 R_{125} groups;
- 15 R_2 is selected from the group consisting of H; C₁-C₆ alkyl, optionally substituted with 1, 2, or 3 substituents that are independently selected from the group consisting of C₁-C₃ alkyl, halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, and -NR_{1-a}R_{1-b}; wherein
- 20 R_{1-a} and R_{1-b} are -H or C₁-C₆ alkyl; -(CH₂)₀₋₄-aryl; -(CH₂)₀₋₄-heteroaryl; C₂-C₆ alkenyl; C₂-C₆ alkynyl; -CONR_{N-2}R_{N-3}; -SO₂NR_{N-2}R_{N-3}; -CO₂H; and -CO₂-(C₁-C₄ alkyl);
- 25 R_3 is selected from the group consisting of H; C₁-C₆ alkyl, optionally substituted with 1, 2, or 3 substituents independently selected from the group consisting of C₁-C₃ alkyl, halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, and -NR_{1-a}R_{1-b}; -(CH₂)₀₋₄-aryl; -(CH₂)₀₋₄-heteroaryl; C₂-C₆ alkenyl;
- 30 C₂-C₆ alkynyl; -CO-NR_{N-2}R_{N-3}; -SO₂-NR_{N-2}R_{N-3}; -CO₂H; and -CO-O-(C₁-C₄ alkyl);
- wherein

R_{N-2} and R_{N-3} at each occurrence are independently selected from the group consisting of

-C₁-C₈ alkyl optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of -OH, -NH₂, phenyl and halogen; -C₃-C₈ cycloalkyl; -(C₁-C₂ alkyl)-(C₃-C₈ cycloalkyl); -(C₁-C₆ alkyl)-O-(C₁-C₃ alkyl); -C₂-C₆ alkenyl; -C₂-C₆ alkynyl; -C₁-C₆ alkyl chain with one double bond and one triple bond; aryl; heteroaryl; heterocycloalkyl; or

R_{N-2}, R_{N-3} and the nitrogen to which they are attached form a 5, 6, or 7 membered heterocycloalkyl or heteroaryl group, wherein said heterocycloalkyl or heteroaryl group is optionally fused to a benzene, pyridine, or pyrimidine ring, and said groups are unsubstituted or substituted with 1, 2, 3, 4, or 5 groups that at each occurrence are independently C₁-C₆ alkyl, C₁-C₆ alkoxy, halogen, halo C₁-C₆ alkyl, halo C₁-C₆ alkoxy, -CN, -NO₂, -NH₂, NH(C₁-C₆ alkyl), N(C₁-C₆ alkyl)(C₁-C₆ alkyl), -OH, -C(O)NH₂, -C(O)NH(C₁-C₆ alkyl), -C(O)N(C₁-C₆ alkyl)(C₁-C₆ alkyl), C₁-C₆ alkoxy C₁-C₆ alkyl, C₁-C₆ thioalkoxy, and C₁-C₆ thioalkoxy C₁-C₆ alkyl;

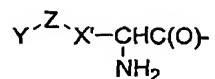
or wherein,

R₂, R₃ and the carbon to which they are attached form a carbocycle of three thru seven carbon atoms, wherein one carbon atom is optionally replaced by a group selected from -O-, -S-, -SO₂-, or -NR_{N-2}-.

2. A compound according to claim 1, wherein R_n is -C(=O)-(CRR')₁₋₆R₁₀₀.

3. A compound according to claim 1, wherein R_n is -C(=O)-(CRR')₀₋₆R₁₀₀, where R₁₀₀ is not -heterocyclyl-W-aryl.

4. A compound according to claim 1, wherein R_n is



wherein

5 X' is C₁-C₄ alkylidenyl optionally substituted with 1, 2, or 3 methyl groups; or -NR₄₋₆-, where R₄₋₆ is -H or C₁-C₆ alkyl; or

R₄ and R₄₋₆ combine to form -(CH₂)_{n10}-, wherein

n₁₀ is 1, 2, 3, or 4;

10 Z is selected from a bond; SO₂; SO; S; and C(O);

Y is selected from H; C₁-C₄ haloalkyl; C₅-C₆ heterocycloalkyl containing at least one N, O, or S; phenyl; OH; -N(Y₁)(Y₂); C₁-C₁₀ alkyl optionally substituted with 1 thru 3 substituents which can be the same or different and are
15 selected from halogen, hydroxy, alkoxy, thioalkoxy, and haloalkoxy; C₃-C₈ cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from C₁-C₃ alkyl, and halogen; alkoxy; phenyl optionally substituted with halogen, C₁-C₄ alkyl, C₁-C₄ alkoxy, CN or NO₂; phenyl C₁-C₄ alkyl
20 optionally substituted with halogen, C₁-C₄ alkyl, C₁-C₄ alkoxy, CN or NO₂; wherein

Y₁ and Y₂ are the same or different and are H; C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 substituents selected from the group consisting of halogen, C₁-C₄ alkoxy, C₃-C₈
25 cycloalkyl, and OH; C₂-C₆ alkenyl; C₂-C₆ alkanoyl; phenyl; -SO₂- C₁-C₄ alkyl; phenyl C₁-C₄ alkyl; and C₃-C₈ cycloalkyl C₁-C₄ alkyl; or

-N(Y₁)(Y₂) forms a ring selected from piperazinyl, piperidinyl, morpholinyl, and pyrrolidinyl, wherein
30 each ring is optionally substituted with 1, 2, 3, or 4 groups that are independently C₁-C₆ alkyl, C₁-C₆ alkoxy, C₁-C₆ alkoxy C₁-C₆ alkyl, or halogen.

5. A compound according to claim 1 wherein R_1 is $(CH_2)_{n_1}-$
(R_{1-aryl}) where n_1 is zero or one and R_{1-aryl} is phenyl optionally
substituted with 1, 2, 3, or 4 groups independently selected
from C_1-C_6 alkyl optionally substituted with 1, 2, or 3
5 substituents selected from the group consisting of C_1-C_3 alkyl,
halogen, $-OH$, $-SH$, $-NR_{1-a}R_{1-b}$, $-C\equiv N$, $-CF_3$, and C_1-C_3 alkoxy;
halogen; C_1-C_6 alkoxy; $-NR_{N-2}R_{N-3}$; and OH ; wherein

R_{1-a} and R_{1-b} are $-H$ or C_1-C_6 alkyl;

R_{N-2} and R_{N-3} at each occurrence are independently selected
10 from the group consisting of $-C_1-C_8$ alkyl optionally
substituted with 1, 2, or 3 groups independently
selected from the group consisting of $-OH$, $-NH_2$,
phenyl and halogen; $-C_3-C_8$ cycloalkyl; $-(C_1-C_2$ alkyl)-
(C_3-C_8 cycloalkyl); $-(C_1-C_6$ alkyl)- O -(C_1-C_3 alkyl); $-$
15 C_2-C_6 alkenyl; $-C_2-C_6$ alkynyl; $-C_1-C_6$ alkyl chain with
one double bond and one triple bond; aryl;
heteroaryl; heterocycloalkyl; or

R_{N-2} , R_{N-3} and the nitrogen to which they are attached
form a 5, 6, or 7 membered heterocycloalkyl or
20 heteroaryl group, wherein said heterocycloalkyl
or heteroaryl group is optionally fused to a
benzene, pyridine, or pyrimidine ring, and said
groups are unsubstituted or substituted with 1,
2, 3, 4, or 5 groups that at each occurrence
25 are independently C_1-C_6 alkyl, C_1-C_6 alkoxy,
halogen, halo C_1-C_6 alkyl, halo C_1-C_6 alkoxy,
 $-CN$, $-NO_2$, $-NH_2$, $NH(C_1-C_6$ alkyl), $N(C_1-C_6$
alkyl)(C_1-C_6 alkyl), $-OH$, $-C(O)NH_2$, $-C(O)NH(C_1-C_6$
alkyl), $-C(O)N(C_1-C_6$ alkyl)(C_1-C_6 alkyl), C_1-C_6
30 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, and C_1-C_6
thioalkoxy C_1-C_6 alkyl.

6. A compound according to claim 5, wherein R_1 is aryl,
heteroaryl, heterocyclyl, $-C_1-C_6$ alkyl-aryl, $-C_1-C_6$ alkyl-

heteroaryl, or -C₁-C₆ alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -NO₂, -NR₁₀₅R'₁₀₅, -CO₂R, -N(R)COR', or -N(R)SO₂R' (where R₁₀₅, R'₁₀₅, R and R' are as defined above), -C(=O)-(C₁-C₄) alkyl, -SO₂-amino, -SO₂-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO₂-(C₁-C₄) alkyl, or

C₁-C₆ alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C₃-C₇ cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, -C₁-C₆ alkyl and mono- or dialkylamino, or

C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, -C₁-C₃ alkoxy, amino, mono- or dialkylamino and -C₁-C₃ alkyl, or

C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, C₁-C₆ alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo.

7. A compound according to claim 6, wherein R₁ is -C₁-C₆ alkyl-aryl, -C₁-C₆ alkyl-heteroaryl, or -C₁-C₆ alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -NO₂, -NR₁₀₅R'₁₀₅, -CO₂R, -N(R)COR', or -N(R)SO₂R' (where R₁₀₅, R'₁₀₅, R and R' are as defined above),

-C(=O)-(C₁-C₄) alkyl, -SO₂-amino, -SO₂-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO₂-(C₁-C₄) alkyl, or

C₁-C₆ alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C₃-C₇ cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, -C₁-C₆ alkyl and mono- or dialkylamino, or

C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, -C₁-C₃ alkoxy, amino, mono- or dialkylamino and -C₁-C₃ alkyl, or

C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, C₁-C₆ alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo.

8. A compound according to claim 7, wherein R₁ is

-(CH₂)-aryl, -(CH₂)-heteroaryl, or -(CH₂)-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -NO₂, -NR₁₀₅R'₁₀₅, -CO₂R, -N(R)COR', or -N(R)SO₂R' (where R₁₀₅, R'₁₀₅, R and R' are as defined above), -C(=O)-(C₁-C₄) alkyl, -SO₂-amino, -SO₂-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO₂-(C₁-C₄) alkyl, or

C₁-C₆ alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C₃-C₇ cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, -C₁-C₆ alkyl and mono- or dialkylamino, or

C₁-C₁₀ alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, -C₁-C₃ alkoxy, amino, mono- or dialkylamino and -C₁-C₃ alkyl, or

C₂-C₁₀ alkenyl or C₂-C₁₀ alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF₃, C₁-C₃ alkoxy, amino, C₁-C₆ alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo.

9. A compound according to claim 8, wherein R₁ is -CH₂-phenyl or -CH₂-pyridinyl where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, C₁-C₄ alkoxy, hydroxy, -NO₂, and

C₁-C₄ alkyl optionally substituted with 1, 2, or 3 substituents independently selected from halogen, OH, SH, NH₂, NH(C₁-C₆ alkyl), N-(C₁-C₆ alkyl)(C₁-C₆ alkyl), C≡N, CF₃.

10. A compound according to claim 9, wherein R₁ is -CH₂-phenyl or -CH₂-pyridinyl where the phenyl or pyridinyl rings are each optionally substituted with 1 or 2 groups independently selected from halogen, C₁-C₂ alkyl, C₁-C₂ alkoxy, hydroxy, -CF₃, and -NO₂.

11. A compound according to claim 10, wherein R₁ is -CH₂-phenyl where the phenyl ring is optionally substituted with 2 groups independently selected from halogen, C₁-C₂ alkyl, C₁-C₂ alkoxy, hydroxy, and -NO₂.

12. A compound according to claim 11, wherein R₁ is benzyl, or 3,5-difluorobenzyl.

13. A compound according to claim 1, wherein X is O.

14. A compound according to claim 1, X is S.

15. A compound according to claim 1, X is NR₂₀.

16. A compound according to claim 1, X is NR₂₀NR₂₀.

17. A compound according to claim 1 selected from the group consisting of:

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-ethylbenzyl) oxy] propyl } - N, N-dipropylisophthalamide;

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-ethylbenzyl) oxy] propyl } - 5-methyl- N, N-dipropylisophthalamide;

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-ethylbenzyl) oxy] propyl } - 5-bromo- N, N-dipropylisophthalamide;

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-ethylbenzyl) oxy] propyl } - 5-cyano- N, N-dipropylisophthalamide;

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-ethylbenzyl) oxy] propyl } - 5- (1,3-oxazol-2-yl) - N, N-dipropylisophthalamide;

N' - { (1S) - 2-amino-1- (3,5-difluorobenzyl) - 3- [(3-

ethylbenzyl)oxy]propyl}-N,N-dipropyl-5-(1,3-thiazol-2-yl)isophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-5-ethynyl-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-5-ethyl-N,N-dipropylisophthalamide;

N³-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-N¹,N¹-dipropylbenzene-1,3,5-tricarboxamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-5-[(dimethylamino)methyl]-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethynylbenzyl)oxy]propyl}-5-(1,3-oxazol-2-yl)-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethynylbenzyl)oxy]propyl}-5-methyl-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-(trifluoromethyl)benzyl)oxy]propyl}-5-(1,3-oxazol-2-yl)-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-(trifluoromethyl)benzyl)oxy]propyl}-5-methyl-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-isopropylbenzyl)oxy]propyl}-5-(1,3-oxazol-2-yl)-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-isopropylbenzyl)oxy]propyl}-5-methyl-N,N-dipropylisophthalamide;

N'-{(1S)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-methoxybenzyl)oxy]propyl}-5-(1,3-oxazol-2-yl)-N,N-

dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- [(3-methoxybenzyl) oxy]propyl} -5-methyl-*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-ethynylphenyl) cyclopropyl] oxy}propyl} -5- (1,3-oxazol-2-yl) -*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-ethynylphenyl) cyclopropyl] oxy}propyl} -5-methyl-*N,N*-dipropylisophthalamide;

N' - [(1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- ({1- [3-(trifluoromethyl) phenyl] cyclopropyl} oxy) propyl] -5- (1,3-oxazol-2-yl) -*N,N*-dipropylisophthalamide;

N' - [(1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- ({1- [3-(trifluoromethyl) phenyl] cyclopropyl} oxy) propyl] -5-methyl-*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-isopropylphenyl) cyclopropyl] oxy}propyl} -5- (1,3-oxazol-2-yl) -*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-isopropylphenyl) cyclopropyl] oxy}propyl} -5-methyl-*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-methoxyphenyl) cyclopropyl] oxy}propyl} -5- (1,3-oxazol-2-yl) -*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-methoxyphenyl) cyclopropyl] oxy}propyl} -5-methyl-*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-ethylphenyl) cyclopropyl] oxy}propyl} -5- (1,3-oxazol-2-yl) -*N,N*-dipropylisophthalamide;

N' - { (1*S*) -2-amino-1- (3,5-difluorobenzyl) -3- { [1- (3-ethylphenyl) cyclopropyl] oxy}propyl} -5-methyl-*N,N*-dipropylisophthalamide;

N^4 -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-6-(1,3-oxazol-2-yl)- N^2, N^2 -dipropylpyridine-2,4-dicarboxamide;

N^4 -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-6-methyl- N^2, N^2 -dipropylpyridine-2,4-dicarboxamide;

N^2 -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-6-(1,3-oxazol-2-yl)- N^4, N^4 -dipropylpyridine-2,4-dicarboxamide;

N^2 -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-6-methyl- N^4, N^4 -dipropylpyridine-2,4-dicarboxamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-*N*-ethyl-5-(1,3-oxazol-2-yl)-*N*-propylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-*N*-ethyl-5-methyl-*N*-propylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-*N*-butyl-*N*-methyl-5-(1,3-oxazol-2-yl)isophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-*N*-butyl-*N*,5-dimethylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-5-(1,3-oxazol-2-yl)-*N*,*N*-dipropylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(3-ethylbenzyl)oxy]propyl}-5-methyl-*N*,*N*-dipropylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(6-ethylpyridin-2-yl)methoxy]propyl}-5-(1,3-oxazol-2-yl)-*N*,*N*-dipropylisophthalamide;

N' -{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(6-

ethylpyridin-2-yl)methoxy]propyl}-5-methyl-*N,N*-dipropylisophthalamide;

N'-{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(4-ethylpyridin-2-yl)methoxy]propyl}-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide;

N'-{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(4-ethylpyridin-2-yl)methoxy]propyl}-5-methyl-*N,N*-dipropylisophthalamide;

N'-{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(4-ethylpyrimidin-2-yl)methoxy]propyl}-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide;

N'-{(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-[(4-ethylpyrimidin-2-yl)methoxy]propyl}-5-methyl-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-3-butoxy-1-(3,5-difluorobenzyl)propyl]-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-3-butoxy-1-(3,5-difluorobenzyl)propyl]-5-methyl-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-(3-methylbutoxy)propyl]-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-(3-methylbutoxy)propyl]-5-methyl-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-propoxypropyl]-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-propoxypropyl]-5-methyl-*N,N*-dipropylisophthalamide;

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-isobutoxypropyl]-5-(1,3-oxazol-2-yl)-*N,N*-dipropylisophthalamide; and

N'-[(1*S*)-2-amino-1-(3,5-difluorobenzyl)-3-isobutoxypropyl]-5-methyl-*N,N*-dipropylisophthalamide.

18. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition
5 selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's
10 syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of
15 mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises
20 administration of a therapeutically effective amount of a compound selected from the group consisting of a substituted aminoalcohol of the formula (I), or a pharmaceutically acceptable salt or ester thereof, wherein X, R₂₀, R₁, R₂, R₃, R_n and R_c are as defined in claim 1.

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19. A method for making a compound according to claim 1.

20. A pharmaceutical composition comprising a compound according to claims 1 in combination with a physiologically
30 acceptable carrier or excipient.

21. The use of a compound or salt according to claim 1 for the manufacture of a medicament.

22. The use of a compound or salt according to claim 1 for the manufacture of a medicament for use in the treatment or prevention of Alzheimer's disease, mild cognitive impairment Down's syndrome, Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, cerebral amyloid angiopathy, other degenerative dementias, dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, or diffuse Lewy body type of Alzheimer's disease.

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